

CLAIMS

The following claims provided under the heading "Listing of Claims" replace all prior versions, and listings, of claims in the above-identified pending patent application.

Listing of Claims:

Claim 1 (Currently Amended) A computer implemented method for estimating a bucket transition distribution for one or more bonds, comprising:

identifying a plurality of price buckets;

identifying a plurality of attributes related to a first bond;

calculating one or more coefficients based on a historical data set related to the first bond,

wherein the data set relates to the plurality of attributes;

retrieving a plurality of values related to the first bond;

calculating a plurality of bucket transition probabilities for the [[a]] first bond based on at least the one or more coefficients and the plurality of values; and

estimating a bucket transition distribution for the first bond using the bucket transition probabilities.

Claim 2 (Currently amended) The computer implemented method of claim 1, wherein one of the price buckets corresponds to an exit state, and wherein the estimating the bucket transition distribution for the first bond includes estimating a plurality of bucket transitions based on the bucket transition probabilities until the exit state or a maturity date of the first bond is reached, thereby completing a first simulation.

Claim 3 (Currently amended) The computer implemented method of claim 2, wherein the exit state is one of a default and a call.

Claim 4 (Currently amended) The computer implemented method of claim 1, wherein the estimating the bucket transition distribution includes determining the probability that the first bond is in a particular bucket at a particular time.

Claim 5 (Currently amended) The computer implemented method of claim 4, wherein one of the price buckets corresponds to a default state and the estimating the bucket transition distribution includes determining a default rate for a particular time period for the first bond.

Claim 6 (Currently amended) The computer implemented method of claim 5, wherein the estimating the bucket transition distribution includes determining a cumulative default rate for a number of time periods by summing default balances for each of the number of time periods and dividing the sum by an average balance for a first of the number of time periods.

Claim 7 (Currently amended) The computer implemented method of claim 2, further including conducting multiple simulations.

Claim 8 (Currently amended) The computer implemented method of claim 2, further including calculating a plurality of bucket transition probabilities for a second bond; estimating a bucket transition distribution for the second bond using the bucket transition probabilities; and grouping the estimated bucket transition distributions for the first bond and the second bond, thereby

enabling an evaluation of a credit risk of the first bond and the second bond.

Claim 9 (Currently amended) A system for estimating a bucket transition distribution for one or more bonds, comprising:

means for identifying a plurality of price buckets;

means for identifying a plurality of attributes related to a first bond;

means for calculating one or more coefficients based on a historical data set related to the first bond;

means for retrieving a plurality of value related to the first bond;

means for calculating a plurality of bucket transition probabilities for a first bond based on the one or more coefficients and the plurality of values; and

means for estimating a bucket transition distribution for the first bond using the bucket transition probabilities.

Claim 10 (Previously presented) The system of claim 9, further including means for estimating a plurality of bucket transitions based on the bucket transition probabilities until an exit state, corresponding to one of the price buckets, or a maturity date of the first bond is reached, thereby completing a first simulation.

Claim 11 (Original) The system of claim 10, wherein the exit state is one of a default and a call.

Claim 12 (Original) The system of claim 9, wherein the means for estimating includes a means for determining the probability that the first bond is in a particular bucket at a particular time.

Claim 13 (Original) The system of claim 12, wherein the means for estimating includes a means for determining a default rate for a particular time period for the first bond.

Claim 14 (Original) The system of claim 13, wherein the estimating means includes a means for determining a cumulative default rate for a number of time periods by summing default balances for each of the number of time periods and dividing the sum by an average balance for a first of the number of time periods.

Claim 15 (Previously presented) The system of claim 9, further including conducting multiple simulations.

Claim 16 (Previously presented) The system of claim 9 for estimating a bucket transition distribution for one or more bonds, further comprising: means for calculating a plurality of bucket transition probabilities for a second bond; means for estimating a bucket transition distribution for the second bond using the bucket transition probabilities of the second bond; and means for grouping a plurality of the bucket transition distributions for the first bond and the second bond, thereby enabling an evaluation of the credit risk of the first bond and the second bond.

Claim 17 (Currently Amended) A computer readable medium for estimating a bucket transition distribution for one or more bonds, the medium comprising a program to cause a processor to implement:

identifying a plurality of price buckets;

identifying a plurality of attributes related to a first bond;

calculating one or more coefficients based on a historical data set related to the first bond,

wherein the data set relates to the plurality of attributes;

retrieving a plurality of values related to the first bond;

calculating a plurality of bucket transition probabilities for the [[a]] first bond based on at least the one or more coefficients and the plurality of values; and

estimating a bucket transition distribution for the first bond using the bucket transition probabilities.

Claim 18 (Previously presented) The computer readable medium of claim 17, wherein one of the price buckets corresponds to an exit state, and wherein estimating a bucket transition distribution step includes estimating a plurality of bucket transitions based on the bucket transition probabilities until the exit state or a maturity date of the first bond is reached, thereby completing a first trial.

Claim 19 (Previously presented) The computer readable medium of claim 18, wherein the exit state is one of a default and a call.

Claim 20 (Previously presented) The computer readable medium of claim 19, wherein estimating the bucket transition distribution includes determining the probability that the first bond is in a particular bucket at a particular time.

Claim 21 (Previously presented) The computer readable medium of claim 20, wherein one of the price buckets corresponds to a default state and estimating the bucket transition distribution includes determining a default rate for a particular time period for the first bond.

Claim 22 (Previously presented) The computer readable medium of claim 21, wherein estimating the bucket transition distribution includes determining a cumulative default rate for a number of time periods by summing a plurality of default balances for each of the number of time periods and dividing a sum by an average balance for a first of the number of time periods.

Claim 23 (Previously presented) The computer readable medium of claim 17, wherein the estimating step includes repeatedly estimating a plurality of bucket transitions based on the bucket transition probabilities until the exit state or maturity date of the first bond is reached, thereby completing multiple trials.

Claim 24 (Previously presented) The computer readable medium of claim 17, further including calculating a plurality of bucket transition probabilities for a second bond; estimating a bucket transition distribution for the second bond using the bucket transition probabilities for the second bond; and grouping the bucket transition distributions for the first bond and the second bond, thereby enabling an evaluation of the credit risk of the bonds.

Claim 25 (Previously presented) A device for estimating a bucket transition distribution for one or more bonds, comprising a processor configured to: identify a plurality of price buckets; calculate a plurality of bucket transition probabilities for a first bond; and estimate a bucket

transition distribution for the first bond using the bucket transition probabilities.

Claim 26 (Previously presented) The device of claim 25, wherein one of the price buckets corresponds to an exit state, and wherein the processor is configured to estimate bucket transitions based on the bucket transition probabilities until the exit state or a maturity date of the first bond is reached, thereby completing a first simulation.

Claim 27 (Original) The device of claim 26, wherein the exit state is one of a default and a call.

Claim 28 (Previously presented) The device of claim 27, wherein the processor is configured to determine a probability that the first bond is in a particular bucket at a particular time.

Claim 29 (Previously presented) The device of claim 28, wherein one of the price buckets corresponds to a default state and the processor is configured to determine a default rate for a particular time period for the first bond.

Claim 30 (Original) The device of claim 29, wherein the processor is configured to determine a cumulative default rate for a number of time periods by summing default balances for each of the number of time periods and dividing the sum by an average balance for a first of the number of time periods.

Claim 31 (Previously presented) The device of claim 26, wherein the processor is configured to repeatedly estimate bucket transitions based in the bucket transition probabilities until the exit

state or maturity date of the first bond is reached, thereby completing multiple simulations.

Claim 32 (Previously presented) The device of claim 26, wherein the processor is further configured to calculate a plurality of bucket transition probabilities for a second bond; estimate a bucket transition distribution for the second bond using the calculated bucket transition probabilities for the second bond; and group the bucket transition distributions for the first bond and the second bond, thereby enabling an evaluation of the credit risk of the first bond and the second bond.